Illuminating The Time Machine: H.G. Wells and the Magic Lantern Nicholas Escobar

On August 19th, 1666 the famous diarist Samuel Pepys attended a magic lantern show. He commented that Richard Reeve, a fashioner of optical instruments, "upon opticke enquiries, he brighing me a frame he closes on, to see how the rays of light do cut one another, and in a darke room with smoake, which is very pretty. He did also bright a lanthorne with pictures in glasse, to make strange things appear on a wall, very pretty". 1 This wonderful early account of a magic lantern show illustrates one principal use of the device: entertainment. Three years later, the "The New World of English Words" (1696), defined the 'magic lanthorn' as 'a certain small Optical Macheen, that shews by a gloomy Light upon a white Wall, Spectres and Monsters so hideous that he who knows not the Secret, believes it to be perform'd by Magic Art". ² This account focuses on the use of magic lanterns to frighten the viewer. Magic lanterns were also used in many other ways, from education in the classroom to scientific lectures. H.G. Well's science fiction novella The Time Machine seems inspired by the style of a magic lantern show. Like Pepys's experience with "strange things" on the wall, *The Time Machine* features horrific monsters called Morlocks. However, the novella seeks not only to entertain but also to inform. Wells weaves astronomy throughout the novella while still maintaining a sense of

¹ Samuel Pepys, "Sunday 19 August 1666", The Diary of Samuel Pepys http://www.pepysdiary.com/diary/1666/08/19 [Accessed 3rd January 2017]

² Richard D. Altick, The Shows of London (Cambridge, MA: Belknap, 1978), p 117

fantasy. However, the account by the Time Traveller is framed through an oral retelling of what occurred in the past. This storytelling device adds a performative element that would otherwise not be present in a written account or by an omnificent narrator. The Time Traveller is simultaneously giving his account of his fantastical experience, and also *entertaining* the intellectual friends assembled in his house. The Time Traveller's narrative acts as a scientific lecture about time travel while also containing the entertainment value of magic lantern shows. The mixture of scientific observation, ghoulish entertainment, and education cause the *The Time Machine* to parallel that of a magic lantern performance.

The Morlocks are horrific creatures. When the Time Traveller is in the Underworld, he describes them as having "pale, chinless faces and great, lidless, pinkish grey eyes". ³ He says they are "nauseatingly inhuman" (58). Monstrous forms are a motif in the art of magic lantern productions. Scholars reference the Dutch scientist Christian Huygens as the inventor of the magic lantern in the mid-1600's. ⁴ He would screen "slides of phantoms, devils, and other macabre subjects" in front of audiences, including members of "the elite and royal classes" (Barber 73). His magic lantern was known as "the lantern of fright" (Barber 73). Even from its earliest beginnings, the magic lantern was transporting its audiences to different worlds. In the early 19th century, a man named

³ H.G. Wells, and Patrick Parrinder. *The Time Machine*. (London, England: Penguin, 2005.), p 58

⁴ Theodore X. Barber, "Phantasmagorical Wonders: The Magic Lantern Ghost Show in Nineteenth-Century America." *Film History,* Vol. 3, No. 2 (1989): 73-86.

Etienne Gaspard Robertson began staging elaborately orchestrated magic lantern horror shows. The shows were in an abandoned chapel and played for six years (Barber 74). These Phantasmagoria performances contained "animated, shimmering spectral forms" that "terrified and delighted the viewing public". ⁵ Robertson was physicist as well as showman, blending the sciences with entertainment. The macabre spectacle of certain scenes in *The Time Machine* line up with Robertson's showmanship and way of entertaining a rabid audience. Robertson's shows would begin with the audience entering a "somber room painted or draped with black, decorated with gloomy images, and illuminated by a weak lamp" (Barber 74). He would give a speech to the audience, and then "quickly extinguished the light so as to plunge the room in total darkness for the next hour and a half' (Barber 74). He would use the Franklin Harmonica, a "form of musical, water-filled glasses" that provided "a haunting sound" (Barber 74). The emphasis on atmosphere is crucial to scare his patrons. In a similar way, the Time Traveller creates a horrifying atmosphere in his tale. For example, near the story's end when the Time Traveller sees the group of Morlocks on fire, he describes the scene: "And now I was to see the most weird and horrible thing, I think, of all that I beheld in that future age" (79). This is similar to Robertson's speech prior to his shows. The Time Traveller continues to describe "some thirty or forty Morlocks, dazzled by the light and heat, and blundering hither and thither against each other in bewilderment" (80). The creatures are illuminated, in full view of the narrator. When the Time Traveller first descends into the Underworld, he describes the atmosphere: "Great shapes like big

⁵ Lynda Nead, *The Haunted Gallery: Painting, Photography, Film C.1900* (New Haven: Yale UP, 2007), p 50

machines rose out of the dimness, and cast grotesque black shadows, in which dim spectral Morlocks sheltered from the glare" (56). This atmosphere is eerie and frightening, and draws the reader into the tale. Similar to Robertson's showmanship technique, the Time Traveller entrances his audience, and scares them with horrifying images.

The mechanics of the magic lantern are alluded to in *The Time Machine*. JG Hodgins writes in his book *The School House*, published in 1857, the uses of a magic lantern in the classroom. He comments that the magic lantern "is now considered of sufficient educational importance to be used in our colleges and schools to illustrate the various branches of knowledge". ⁶ The magic lantern therefore acted as a tool to teach multiple different studies. He mentions that "If two ounces of powdered camphor be put into a pint of oil, it will add greatly to the brilliancy of the light obtained" (Hodgins 251). The Time Traveller also uses camphor after he finds it in the South Kensington museum. He muses on the fact that "In the universal decay this volatile substance had chanced to survive" (72). He also "remembered that it was inflammable and burnt with a good bright flame" (72). The technique of "a dissolving view" is present when the model of the time

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⁶ George J. Hodgins, *The School House: Its Architecture, External and Internal Arrangements, with Elevations and Plans for Public and High School Buildings: Together with Illustrated Papers on the Importance of School Hygiene and Ventilation: Also with Practical Suggestions as to School Grounds, School Furniture, Gymnastics, and the Uses and Value of School Apparatus.* (Toronto: Publisher Not Identified, 1876), p 250

machine disappears into the future. 7 Once the Time Traveller pulls the lever on the machine "One of the candles on the mantel was blown out, and the little machine suddenly swung round, became indistinct, was seen as a ghost for a second perhaps as an eddy of faintly glittering brass and ivory and it was gone--vanished!" (7-8). The idea of the image appearing as a ghost matches with Marsh's description of the dissolving view technique that started in the early 19th century. Joss Marsh writes that the "light was slowly stopped down on one lens and one image and brought up on another, with perfect registration so that the second image slowly – almost magically – replaced the first on the illuminated screen" (Marsh 22). In the George Pal directed 1960 film adaptation of *The* Time Machine, this particular scene uses a similar technique to the dissolving view (Figure 1.1). 8 Even in the age of cinema, the magic lantern makes its presence known. Equally, there is a certain amount of showmanship involved in the demonstration with the time machine model. Marsh writes that Victorian dissolving views had Phantasmagoria lanternists located behind the screen "in total darkness, hidden from the audience" (Marsh 23). He writes that the "Limelight, and the front projection that it made possible, turned the lanternists who embraced the dissolving views into showmeneducators, expounding their marvels in full view of their much-enlarged audiences" (Marsh 23). The Time Traveller himself is taking upon this role as a

⁷ Joss Marsh, "Dickensian Dissolving Views: The Magic Lantern, Visual Story-telling and the Victorian Technological Imagination." *Cinematicity in Media History* (2013), p 22.

⁸ 'The Time Machine, dir. by George Pal (Metro-Goldwyn-Mayer, 1960).

"lanternist," both during the physical demonstration with the model Time Machine, and the long monologue that follows.

The Time Traveller glances up at the wide expanse of the night sky and thinks about the immense age of the universe. He says that the while "the old constellations had gone from the sky" the Milky Way "was still the same tattered streamer of star-dust as of yore" (63). He also realizes that the stars "dwarfed [his] own troubles and all the gravities of terrestrial life" because of "their unfathomable distances, and the slow inevitable drift of their movements out of the unknown past into the unknown future" (63). This sudden focus on astronomy is intriguing, considering that magic lanterns have an intimate relationship with the study of the stars. The French astronomer and author Camile Flammarion "used the magic lantern to illustrate his lectures" (Nead 231). Flammarion viewed the magic lantern (and the cinematograph's) "constant series of changing views" as "precisely the nature of the sights that were offered to the astronomical observer" (Nead 232). As the Time Traveller recounts his journey into the future, he tells his audience that "the night came like the turning out of a lamp, and in another moment came tomorrow", and that "Tomorrow night came black, then day again, night again, day again, faster and faster still" (17-18). The act of time travelling resembles the "constant series of changing views" that Flammarion saw as a connection between the magic lantern and astronomy. This vision also resembles a multi-media lecture that included magic lanterns, "A Trip to the Moon" from 1887. After the trip to the moon, the images returned to earth where "the effects of sunset, moonrise and a lunar eclipse were depicted

in sequence" (Nead 223). The sense of sequence is relevant in both the Time Traveller's examination of the sequential path of time as referenced through the night sky, as well as his sequential path into the future via the Time Machine. Even more crucial is that "A Trip to the Moon" was meant to be a scientific lecture using magic lanterns to transport audiences to another world, and to show the quick passing of time. Near the end of *The Time Machine*, the Time Traveller describes the Earth in the far future. Chilling images, like how the sun would "grow larger and duller in the westward sky," resemble the sequence of images present in "A Trip to the Moon" (90). Flammarion published his book, *Popular Astronomy*, in 1880 in French. It was republished in English in 1894, which is the same year of *The Time Machine*'s publication. At one point in the book, he writes about how a man's spirit leaves the earth and is "transported in some hours or days to a great distance, would see the earth of former times...for the aspect of the earth would not arrive where he was till after a long delay" (232). He also writes that "what had been for a long time the past for the earth is only the present for a distant observer in space" (232). It's an interesting rumination on time and how it changes in a relative fashion. Flamarrion is also describing a situation that resembles time travel, the ability to see "the earth of former times" simply by traveling a great distance through space.

When the Time Traveller begins his tale of futuristic travel, Wells paints the setting in detail. The narrator also describes the disconnect between witnessing the retelling, and reading the dictation. He writes that he feels:

"the inadequacy of pen and ink-and, above all, my own inadequacy-to express its quality. You read, I will suppose, attentively enough; but you cannot see the speaker's white, sincere face in the bright circle of the little lamp, nor hear the intonation of his voice. You cannot know how his expression followed the turns of his story!" (16)

The emphasis is on the importance of the *visual* in live storytelling. He stresses that the reader cannot *see* the Time Traveller's face. Equally, the crucial point on *hearing* the intonation of the voice. The narrator is speaking of the Time Traveller's retelling as a performative play, as a presentation that must be seen to be fully appreciated. He describes the atmosphere of the room, before the story begins: "Most of us hearers were in shadow, for the candles in the smoking-room had not been lighted, and only the face of the Journalist and the legs of the Silent Man from the knees downward were illuminated" (16). It is an eerie setup for a story. Bodies are broken down into different parts by the light, and the room is filled with smoke. Turning to an account by author Alison Utley, she describes a homemade setup of a magic lantern show in the family's kitchen:

We set it up in the kitchen, on the servant boy's stool, placed on a table. A sheet was hung from the clothes-line, across the room, to take the pictures...and the lamp was extinguished so that the place was in darkness...my brother stood on the chair and manipulated the slides: the tiny lantern sent a stream of smoke to the low ceiling, and there was a delicious odour of hot japanned metal. The brightly coloured pictures filled us with joy, and we looked at them over and over again, inventing tales about them, swept into a world of romance...The wind then blew through an open door, and the little lantern flame flared up; the sheet flew out like a snail, and the circular picture

of a ship in a storm rocked violently as it was flung on the billowing field. It was worth everything to see such a wonder, we thought, as we steadied the lantern and gazed at the projection" (Nead 52-52)

There is once again an emphasis on the senses. Utley describes the smell of the metal from the burning lantern, as well as the sensory experience of the wind blowing the sheet. The real world is invading the romantic fantastic world in a striking fashion. This also occurs in *The Time Machine*. The Time Traveller describes Weena sticking flowers in his pockets. Suddenly the narrative stops:

The Time Traveller paused, put his hand into his pocket, and silently placed two withered flowers, not unlike very large white mallows, upon the little table. Then he resumed his narrative. (61)

In a similar way to the wind blowing on the sheet and affecting the visible image, the Time Traveller's dramatic reveal of the flowers acts as an interruption that enhances the believability of the narrative. Utley's account also contains a lantern, smoke, and the vital word "projection". There is also an emphasis on the lamp being extinguished "so that the place was in darkness". Lynda Nead comments that "For a time, even the well-to-do farmhouse kitchen becomes a haunted gallery, filled with shadows, ghostly images and phantom illusions" (Nead 52). The sense of transportation through storytelling is present through the art of magic lanterns. One need only look at the exact moment when the Time Traveller finished his tale, to see how his storytelling had transported his audience into another realm. Wells writes that "there was a momentary stillness" following the story,

followed by a description of the "audience": "They were in the dark, and little spots of colour swam before them. The Medical Man seemed absorbed In the contemplation of our host. The Editor was looking hard at the end of his cigar-the sixth. The Journalist fumbled for his watch. The others, as far as I remember, were motionless" (94). The magical fantastical world that the Time Traveller recounted had barged into the real world. The description of "little spots of colour" swimming in front of the men, and the eerie motionless atmosphere following the story shows the effect that the tale had on the audience members. It cast a spell on them. This spell seems to seep onto the Time Traveller because once his audience expresses doubts as to the real nature of the story, he loses track of his own reality: "This room and you and the atmosphere of everyday is too much for my memory. Did I every make a Time Machine, or a model of a Time Machine? Or is it all only a dream? They say life is a dream, a precious poor dream at times..." (95). The painting *The Sower of the Systems* by G.F. Watts, is said to have originated from "light thrown on his bedroom ceiling by a night-light" (Nead 202). In this way, as Nead puts it, "the imagination of the dozing child, the feverish adult or the creative artist is possessed by the luminous images and shadows cast by the lantern in a darkened room. In a semi-conscious state, familiar surroundings are made strange; images are at once real and fantastic, tangible and transparent" (Nead 202). The key word here is "possessed". In a similar way to Watts being possessed by the light from his nightlight and transported to another world, the Time Traveller fully possesses his audience's attention with fantastical images and leaves them in a state of mesmerism.

What is intriguing about the long monologue that is the Time Traveller's tale is that it becomes so lifelike and *real*, even though the listeners are simply hearing an oral presentation. The colors, settings, characters, horrors come to life before the listeners, and subsequently the reader's, eyes. The Time Traveller's method of storytelling paints images much like a magic lantern, details monsters like a magic lantern show, and discusses science like a scientific lecture using a magic lantern. Here lies the importance of the parallel. Through structuring his story in the fashion of a magic lantern show, the Time Traveller brings his story to life while simultaneously educating, horrifying, and thrilling his audience members as well as the readers of Wells' timeless novella.

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